# FALL OR FLOAT: A CINEMATOGRAPHIC HISTORY OF THE DISAPPEARANCE OF THE GROUND AND THE PARADIGM OF STABILITY

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"...but how blind the creatures are who stand upon the ground" 1

"Falling men, floating feathers" (PETER GREENAWAY, 1997: 34)

#### **AVIATION: GOD OR ICARUS?**

The twentieth century began with various representative devices that radically changed the human conceptions of a stable horizon and of point of view. Two of the most significant would be the cinematograph and the aeroplane, two devices that can be linked to each other by the universal human desire to conquer the skies: the "inexpiable longing for the heights" (Bachelard, 1993: 120)

[Image 1]. The relationship between aviation and the cinema dates back to the origins of both technologies, which are recurrently depicted as related in film history.

Edgar Morin specifically dedicates the first chapter of his book *The Cinema, or the Imaginary Man* to this relationship, starting with the idea that "as the nineteenth century dies it bequeaths us two machines" (Morin, 2005: 5): the aeroplane and the movie camera. The aeroplane, explains

Image I. Birdman (Alejandro. G. Iñárritu, 2014).













Image 2. Breaking the Waves (Lars Von Trier, 1996); I Am Cuba (Mikhail Kalatozov, 1964).

Morin, realised the human dream to "break away from the earth" (Morin, 2005: 5), while the film camera responded to the needs of scientific analysis, "the objective eye [...], this laboratory eye" (Morin, 2005: 5), concerned with reflecting the reality of the earth and focusing, especially initially, on the decomposition of movement.

This relationship between cinema and movement had already played a primordial role in a visual paradigm shift that had begun with industrialisation and the birth of modernity, and that was expressed through acceleration and velocity. However, it was the aircraft that additionally provided a substantial shift in point of view. On the one hand, it permitted a radical change of scale—for that time—as it enabled a vertical distancing from ground level, creating a crisis in the concept of dimensions for the human being in relation to land, and attaining for us a "God's-eye view" (Steyerl, 2011: np) [Image 2].

On the other hand (and even more significantly because of its peculiar nature), it introduced the zenith view, perpendicular to the ground: the cartographic view of the world as a map: an abstract representation that "escaped that Euclidean neutralization" (Virilio, 1984: 24), where there is neither up nor down.



Image 3. Wings of Desire (Der Himmel über Berlin, Wim Wenders, 1987).

Both the cinematograph and the aeroplane began their existence as the extravagant "hobbies" of wealthy pioneers and experimenters who privately financed their developments, in a quest to break records or simply for the pleasure of research. However, they were very soon assimilated into industry practices. In particular, 1914 saw two of the first flights that would change our understanding of both machines: the first commercial flight³ and the first reconnaissance and attack flights at the service of the military.⁴ Aerial space had finally been "civilized, nationalized, made 'navigable'" (Morin, 2001: 14) [Image 3].

But it was the reconnaissance flights that brought the two machines together, with photographic and cinematographic cameras installed on the plane for the purpose of recording and mapping the land below. The view thus became a "doubly mechanistic view", combining the "I am seeing" of the camera with the "I am flying" of the airship (Castro, 2013: 125)<sup>5</sup>—and subsequently trading in the "I am seeing" for an "I am spying".

In addition to this double view in relation to the apparatuses, a new point of view was introduced in relation to the spectator (in this case the pilot or the camera operator), whose body became weightless for the first time, that from a distance

replaced the battle with a new "landscape with unexpected intelligibility" (Jay, 1993: 214). The pilot, according to Martin Jay and Edgar Morin, represents the soldier kept safe from the battle, but this situation is more peculiar than it may at first appear.

Paul Virilio offers what is perhaps a more exhaustive study of the experience of these combatants and cameramen of the air in his book *Guerre et Cinéma: Logistique de la Perception* (1984). The situation of the pilots was peculiar not only

because they were elevated "above the confusion of the earth-bound—and often earth-bespattered—combatants" (Jay, 1993: 213), at an obviously safe distance from the hand-to-hand combat below, as Jay and Morin suggest, but also because of their immersion in an experience of "isolation" (Virilio, 1984: 31); immersive

IN ANY CASE, BOTH JAY AND VIRILIO SEEM TO CONSTRUCT A ROMANTIC VIEW OF THE CONDITION OF THE PILOT AND, ESPECIALLY, OF THE CAMERA OPERATOR. IT IS WORTH NOTING HOW DIFFICULT IT WOULD HAVE BEEN TO OPERATE A CAMERA — WHICH IN THOSE DAYS WOULD HAVE BEEN A PLATE CAMERA—GIVEN ITS SIGNIFICANT WEIGHT AND CONSIDERABLE FRAGILITY

due to the cotton balls that were stuffed in their ears to block out the noise, the protective goggles to shield them from the wind — sometimes imposing a specific frame around their vision — and even the protective helmet. Their sensory detachment from the battle was practically total and suggestive of something resembling a quasi-cinematic experience.

Virilio stresses the point that the distance was not just physical but psychological, and he focuses especially on its character of spectacle and representation, both in the experience of the pilot himself and through the images taken from the air. Through a gaze based on distance and manipulation of spatial dimensions, Virilio suggests that the combat was "aestheticised" (Virilio, 1984: 26). To illustrate this idea, he cites the anecdote of Mussolini's son, who recalls a bombing in Abys-

sinia (1935-6) and compares it to the "opening of a rose" (Virilio, 1984: 26). Virilio observes how the boy's description is in itself a cinematic construction, possibly conditioned by the recollection, imagination and assimilation of the aerial view through the prism of the cinematic experience, which did not yet exist in 1914.

In any case, both Jay and Virilio seem to construct a romantic view<sup>6</sup> of the condition of the pilot and, especially, of the camera operator. It is worth noting how difficult it would have been

to operate a camera — which in those days would have been a plate camera — given its significant weight and considerable fragility. Additional obstacles would have been the low temperatures due to the altitude, which would have made it hard to operate the instruments with bare hands, while the use of gloves would re-

duce their dexterity; the wind resulting from the air resistance together with the velocity of the aircraft, assuming ideal weather conditions; and, in such conditions, attempting to choose, maintain and focus a shot, while ensuring a fast enough exposure for an image that was not blurred or shaky — after all, the purpose of the images was to provide information on the enemy, making detail and framing extremely important. And all of this probably had to be achieved between moments under enemy fire.

Given the conditions of aviation in 1914, the idea suggested by both authors cited above that the aerial battle would be a pleasant and aesthetic experience because of the distance from the ground battle seems far from complete. Such an idea is more reminiscent of the ironic tone used by Stanley Kubrick at the end of *Dr. Strangelove* 

(Stanley Kubrick, 1964), when the bomber pilot rides a missile to the tune of the song "We'll Meet Again". However, rather than the aesthetic dimension, it was the dimension of abstract spectacle, unknown until then, that would in fact come to permeate a new and unprecedented scopic regime.

While for Jay, Morin or even Virilio, the vertical conquest on the one hand embodied the "myth of Icarian freedom" (Jay, 2007: 164), it was also a precedent for the representation of a flat, abstract world governed by certain codes that many had to learn for the first time after the appearance of those first photographic plates. The photographic dimension of the aerial view was a visual code that few had seen until then, and in many cases people had no idea how to read the information shown on these plates.<sup>7</sup>

The zenith view - unlike the angle shot - offered a planimetric representation of the land but "masked the topography" (Robic, 2013: 182), flattening the heterogeneity of the relief, and turning "the labyrinth of trenches" into "a patterned carpet" (Jay, 1993: 213) and the combat into a spectacle - which would later turn into something almost like a video game [Image 4].8 This abstract map would be based largely on two elements that destabilised cinematographic and photographic framing: the disappearance of the horizon — until then always represented in parallel with the ground lineandwith the lower section of the frame – and, consequently, are-signification of the ground as supporting surface, as it would now, through its photographic dimension, be constructed according to coordinates of north, south, east and west, rather than up and down.

The second destabilising factor would be the disappearance of the human body as a reference of scale, as it was reduced — if not erased altogether — to a stochastic point cloud. It was only after the appearance of the infra-red camera that we would return to a somewhat more humanised perception of these *targets* on screen or film.









Image 4. Aerial photographs from the First World War arranged in map form, © IWM (Q 8533); aerial photograph of a bombardment by British pilots in the First World War, © IWM (O 27521); aerial photography experiments conducted by Samuel F. Perkins, tying photographers to various kites, Credit: Leslie Jones/Boston Public Library; U.S. Aerial Photography School (1918).

### THE DISAPPEARANCE OF THE BODY ON THE SURFACE OF THE EARTH

The body was swallowed up by the scale of the land or disappeared in the battle. For Jay, it is perhaps here that the greatest interest in the aerial perspective lies. In his words, it might be the product of a "compensatory exaltation [...] for only then will the eye survive the dismemberment of the body" (Jay, 1993: 213-214).

The image of war from the air constructs a "no man's land", a territory that swallows up the bodies: and the assimilation of these codes continued beyond the war years and into the inter-war period, thanks to documentary filmmakers like Jean Vigo. Indeed, the proliferation of films with aerial view shots in the inter-war years is symptomatic of this.

In the United States, far from the disasters of war that afflicted Europe, the focus of the vertical conquest was on architecture, the exaltation of its monolith-cities as great technological achievements and representations of economic growth





Image 5. Hats in the Garment District, New York, 1930. Margaret Bourke-White, © Time Inc., Courtesy Monroe Gallery of Photography; The Hudsucker Proxy (Joel and Ethan Cohen, 1994).

and the power of capital. *Manhatta* (Paul Strand and Charles Sheeler, 1921), *Twenty-Four-Dollar Is land* (Robert J. Flaherty, 1927) or the extravagant *Broadway* (Paul Fejos, 1929) are a few examples, all taking New York City as their setting.<sup>10</sup>

Already in the opening minutes of Flaherty's film, the intertitles present a state of the question that continues to affect the representation of bodies from above, but with a different emphasis, an emphasis on capital: "New York, symbol of impressive industry, finance, power, where men are dwarfed by the immensity of that which they have conceived — machines, skyscrapers — mountains of steel and stone." This exaltation of economic power from above would of course be cut short by the Crash of 1929 [Image 5].

In Europe, where the view from the steeple top was still reserved for the clergy, the aeroplane continued to be an instrument for describing and mapping, although its object was no longer the battlefield but the recently rebuilt cities: *Berlin, Symphony of a Metropolis* (Berlin - Die Sinfonie der Grosstadt, Walter Ruttmann, 1927), *Impressionen vom alten Marseiller Hafen* (Vieux Port) (László Moholy-Nagy, 1929) and À propos de Nice (Jean Vigo, 1930), among others.

However, this new mapping of cities continued to use certain codes acquired in the period of its birth: land as map (repeated in both Vigo's and Moholy-Nagy's films), as the disappearance of the body in the land.

In his notes prior to filming, Vigo wrote: "In the whole first part, it is absolutely essential that the presence of humankind and its works be in no way revealed. The wondrous country was there, given by nature. The country is under the stewardship of the sky and the influence of the sea. The screen opens on the sky" (Vigo, 1929). Here Vigo speaks of the wondrous country, perhaps appealing to the image of nature before human intervention, in opposition to the landscape of destruction that humans left behind following their "works" of war.

The aerial view here leaves aside its status as a weapon for warfare but not for spying, reconnaissance and classification for political purposes. From the distance, the human being is erased or, as Vigo himself shows in what is almost an ironic tone, reduced to the scale of a miniature [Image 6]. The only bodies that are recognised are those of the pilots, shown as individuals in contrast with the masses on the ground. The human being is recognisable now insofar as he is defying gravity and flying high in the sky. However, this safety, attainedthrough his physical distance from the battle, is not only illusory but transitory, as in most cases it will inevitably end with a fall.

#### THE MYTH OF ICARUS: FALL OR FLOAT

With the appearance of aviation and the vertical conquest of space, "opportunities for falling,

Image 6. Á propos de Nice (Jean Vigo, 1930); footage frame showing the pilot Jacques Trolley de Prévaux, who did a reconnaissance flight over Ypres in 1919 to document the appearance of the city after the war.







nose-diving, and crashing increase" (Steyerl, 2011: np). In the BBC documentary *The First World War From Above* (Mark Radice, 2010), the journalist Fergal Keane describes how, in reality, the life expectancy of pilots was lower than that of ground troops, and tells that during the First World War most pilots did not even make it into battle, as they would often die during training manoeuvres, especially on take-off.

Martin Jay, meanwhile, notes that by the end of the First World War some fifty thousand airmen had died, most of them having crashed or been shot down (Jay, 2007: 164), which, he suggests, underscores the parallel with the fate of Icarus [Image 7].

The Icarus myth, invoked in the history of representative art on many occasions, functions in a way as a cautionary tale of the "ultimate ubiquitous failure, of the impossible dream of flying" (Greenaway, 1997: 101). As Peter Greenaway would muse many years later in an exhibition dedicated specifically to explorations of this contradictory figure:<sup>12</sup> is he a hero or an unwitting victim?

The moral is clear: "gravity has shaped our anatomy so that we have our feet anchored on the ground" (Greenaway, 1997: 100), and there-

Image 7. The Italian newspaper *La Domenica* illustrating Orville Wright and Thomas Selfridge's failure in 1908 in one of their experiments (the first fatality in the history of aviation); *The Fall of Icarus*, Jacob Peeter Gowy (1636-38).





Image 8. "Icarus" (Henri Matisse, 1947); Olympia (Leni Riefenstahl, 1936).





fore, there is a certain arrogant defiance of the laws of nature, and both the story of Icarus and mythology in general warn against the perils of trying to reach the place reserved for the gods.

The most extraordinary representation of the Icarus myth is perhaps Henri Matisse's depiction in 1947. In opposition to the classical approach of portraying Icarus falling face first — respecting the classical codes of the representation of gravity Matisse dislocates the hero's fall, presenting an upright Icarus and eliminating all reference to an element of stability, i.e. the ground. Rather than falling, Matisse's Icarus appears to be floating, suspended in a starry sky [Image 8]. The most salient feature of the fall is, in short, that it is "relational" (Steyerl, 2011: np), and thus a representation that eliminates the horizon line in the frame and any reference to a stable surface leaves the fall in a state of suspension that recalls the famous images of divers in Olympia (Leni Riefenstahl, 1938), taken by the German director for the Berlin Olympic Games in 1936.

It is hard to think of these images of Riefensthal's without thinking of the influence that the images of the first German aviators and their machines seen from the ground, resembling birds in flight, must have had on her. Riefensthal herself, in a famous interview in the documentary *The Wonderful Horrible Life of Leni Riefenstahl* (Die macht der bilder: Leni Riefenstahl, Ray Müller,





Image 9. Hells Angels (Howard Hughes, Edmund Goulding, 1930); Olympia (Leni Riefenstahl, 1936).

1993), mentions how her instructions to the camera operators for Olympia were to capture in pictures the idea of the divers turning into birds [Image 9].

It is important to remember that the technological innovation of the underwater camera to shoot these scenes in Olympia has been attributed to her camera operator, Hans Ertl. 13 In his study Leni Riefenstahl and Olympia (1986), Graham Cooper details the technical difficulties that Ertl had to overcome to capture the continuity of the jump and the fall with the camera, describing how Ertl began shooting the jump outside the water, and simultaneously submerged with the swimmer to capture the full trajectory of the dive (Riefenstahl, 1969: 465).14 He also emphasised the reaction of the bodies to the fall, in many cases filming them in slow motion—32 and 48 frames per second—in order to capture the body movements precisely (Graham, 1986: 115). This was a technique that Ertl had developed by shooting ski jump scenes for the Winter Olympics of 1936 and that he himself referred to as Drehschwenk<sup>15</sup> (Graham, 1986: 116). This technique presented a disorienting image, as "the viewer cannot establish his position in relation to the diver" (Graham, 1986: 116). In Ertl's words, they effectively transferred the "desire to fly to a visual code" (Graham, 1986: 117), turning the divers into birds, just as Riefenstahl had instructed. Although the first dives explore this multiplicity of perilous points of view, with the camera Ertl follows the natural trajectory of the dive, always ending with the splash into the water. However, towards the end of the scene, Riefenstahl, in the editing room, inverted the temporal sequence of one of the dives, beginning with the fall and ending on the diving board. This inversion transforms the dive into flight, and from that moment she continues showing the dives from a lower point of view that sets the figures against the sky — increasing the sensation of floating — and cutting the shot before any reference is given to the ground line, or, in this case, before hitting the water. The result is a series of figures that fly with no possibility of falling. The fall is replaced with a suspended false flight, a continuous fall and a continuous state of floating.

This state of suspension forced by the complete disappearance of the ground is what years later, according to Steyerl, would give rise to "perfect stasis", whereby "whole societies around you may be falling just as you are" (Steyerl, 2011: np), without you being aware.

Among the many controversial aspects of Riefenstahl's career, she has been criticised for the way that this spectacle of flights, beauty and achievement masked the war strategies already in motion at that time with a spirit of reconciliation, 16 while in terms of formal aspects, Bordwell and Thompson have suggested that "the framing and editing patterns that turn the athletes into superhuman beings support elements of Nazi mythology" (Bordwell and Thompson, 2004: 134). Just as Riefenstahl managed to distract the audience with the hybrid suspension of a bird-human, she gave official form to a visual paradigm of a groundless human being. Only at the end of her life can we discern in her words this profound contradiction between her bird-divers and what was really going on outside her films, ironically defining the period as "a vertiginous fall" 17 [Image 10].









Image 10. Olympia (Leni Riefenstahl, 1936).

# THE INCLINED PLANE: FROM GERMAN EXPRESSIONISM TO THE SECOND HALF OF THE TWENTIETH CENTURY

[...] a new system that encapsulated the solution to all of the differential symptoms exhibited by modern society, in a single form; indeed, in a single line: the oblique.

(FULLAONDO, 2012: 21)

[Image 11]. While in the aerial views of the First World War the ground was re-signified with the erasure of its coordinates of up and down (replaced by north, south, east and west), by the Second World War it had disappeared altogether, giving official form to a world of weightless bodies in *stasis*. However, between the flight of the First World War and the *stasis* of the Second, in Germany at ground level a very different spectacle emerged.

As Kracauer recalls (in an essay notably critical of his own people), the Germany of the inter-war period was a disoriented nation, but with a marked "intellectual excitement" (Kracauer, 2004: 43) that in a way sought to compensate for the feelings of defeat, punishment and general introspection that characterised the era.

The young men who returned from the trenches, rather concerning themselves with physically rebuilding the country, seemed keen instead to reconstruct German morale and identity. The Weimar Republic illustrated this spirit, but its proclamation was abrupt and "improvised", according to Kracauer (2004: 43). The reality of the country was hunger, unemployment and a

general situation of latent instability in which "the economic world crisis dissolved the mirage of stabilisation" (Kracauer, 2004: 10). However, it was precisely in this context that German film was definitively shaped and began a golden era. There is a formal feature of this period that proliferates in German productions, subsumed as they were in German Expressionism: the Dutch angle. Indeed, its very name is apparently the product of an erroneous translation of "Deutsch" as "Dutch", due to the continued use made both of the inclination of the horizon line in relation to the frame, and the invented landscapes themselves, where all architecture was constructed using diagonals.

Image II. One Week (Buster Keaton, 1920).



The Cabinet of Dr. Caligari (Das Cabinet des Dr. Caligari, Robert Wiene, 1920) is one of the most significant examples of this trend of representing an unstable ground; according to Kracauer's analysis, it is a metaphor for the German State's manipulation of the people, establishing the breeding ground for the rise to power of the National Socialist Party.

This inclination of the horizon was nothing new. The diagonal had always been associated with periods of instability throughout art history — the Laocoön Group in Ancient Greece, Ribera in the Baroque era, or El Greco's mannerism, among others. But in the inter-war period there was a special emphasis on the representation of an inconsistent ground, perhaps reminiscent of the trenches, and more specifically, of the sense of imbalance felt when the bombs struck the earth, and the vibration of the ground similar to an earthquake.

An excellent example that emulates this sensation is Peter Eisenman's memorial to the victims of the Holocaust in Berlin, for which the architect has used the constant changing of the terrain as a central idea to evoke a sense of instability and disorientation in visitors as they walk around the space; possibly the same sensation that Hermann Warm, Walter Rohrig and Walter Reimann, as art directors, sought to achieve in Wiene's film.

There have been other significant cases, such as *The Third Man* (Carol Reed, 1949), in the context of the Cold War; and later, *Brazil* (Terry Gilliam, 1985) or *Do the Right Thing* (Spike Lee, 1989). However, one of the most remarkable cases of this sensation is by Italian filmmaker Michelangelo Antonioni through the character of Giuliana in his film *Red Desert* (Il deserto rosso, Michelangelo Antonioni, 1964). Giuliana personifies the product of this gradual construction of the disappearance of stable ground: she knows what she is missing but she doesn't know why.

With the disappearance of wars and trenches, the world seems to be immersed in an era of ap-

# THIS INCLINATION OF THE HORIZON WAS NOTHING NEW. THE DIAGONAL HAD ALWAYS BEEN ASSOCIATED WITH PERIODS OF INSTABILITY THROUGHOUT ART HISTORY

parent calm, ideal for progress. The enemy now is a phantom, neurosis, conjured up by the progress of an increasingly industrialised world — which also, in the filmmaker's own words, brings forward the discussion of the "ecological problem" (Antonioni, 2002: 267) — and the speed of these changes, which hinders Giuliana's ability to adapt to them.

During a conversation with a man she has just met, Giuliana tries to explain the vertigo that the future represents for her: "She lacked grounding; she had the impression of slipping on an inclined plane, of always being on the point of drowning, and of not having anything." In an interview conducted by Jean-Luc Godard for Issue 160 of Cahiers du Cinema, Antonioni remarked that the crisis that Giuliana represents is not only the problem of adaptation, but also of a "system of values — education, morality, and faith — that is no longer valid, that does not sustain her" (Antonioni, 1971: 27). That system, which had collapsed after two world wars in the first half of the century and the Cold War that followed them, continued to be the object of attempted reinterpretations in the 1960s all over Europe.

The rise of left-leaning youth movements — with settings as notable as the Hungarian Revolution or May 1968 in France — and the sexual revolution of a generation that refused to accept existentialist nihilism as the answer, constituted noteworthy attempts that failed to consolidate a new stability [Image 12].

This disappearance of the conventional systems of reference, using the inclined plane as a means of generating new ways of relating the body to the ground, no longer appertained either







Image 12. Red Desert (Il deserto rosso, Michelangelo Antonioni, 1964); Experiments in Art and Technology (E.A.T.), Group at the 1970 Pepsi-Cola Pavilion Project, Osaka, 1970.

to flight or to *stasis*, but directly and constantly concerned the essential problem of stability, in a certain way recovering the dialogue between body and gravity.

Other movements, however, embraced instability, trying to integrate it as a proposal for the future. In 1964, the same year that Antonioni's Red Desert was released. Claude Parent and Paul Virilio articulated the hypothesis of the Function of the Oblique, which "advocates fixing human life on inclined planes" (Parent, 1970: 5),18 and which two years later would be formalised in the first issue of the manifesto-magazine Architecture Principe (1966). The manifesto argues for "the end of the vertical as the axis of elevation and the end of the horizontal as permanent plane, in favour of the oblique axis and the inclined plane" (Virilio and Parent, 1964),19 stresses the need to enhance the physical relationship between body and ground, making it participate actively in the sensation of gravity, using the body's weight "in the sense of a constant, controlled loss of balance" (Parent, 2009: 21), and supports the definitive erasure of the "idea of comfort" (Parent, 2009: 33) — a highly debatable precept, beyond the strictly theoretical, and whose consequences were presaged by Giuliana in Antonioni's film [Image 13].

In the 1960s and 1970s there was also a proliferation of works that would make reference to this idea, with Bas Jan Ander as one of its greatest exponents, perfectly exemplifying Giuliana's feel-

ings in his audiovisual piece (1971). In this respect it would be René Daadler — a Dutch artist and a contemporary of Bas Jan Ander — who would be responsible for collecting all these works in an exhibition titled *Gravity Art*, presented in Los Angeles in 2008, which brought together thirty films on the theme, all made in the second half of the twentieth century. Was this perhaps a generation clamouring to recover the ground? Its own ground?

The case of the film *Gregory's Girl* (Bill Forsyth, 1981), although later, is highly representative of this movement. In a simple scene with a comedic tone, Gregory explains to the girl lying beside him that human beings are held to the Earth "only by the mystery force called gravity," and goes onto explain that many people panic when they find this out and feel like they are going to fall off.

While the protagonist explains this condition of gravitation, the camera begins to turn slowly, inclining the ground until it is practically verti-

Image 13. The Cabinet of Dr. Caligari (Das Cabinet des Dr. Caligari, Robert Wiene, 1920); French Pavilion at the Venice Biennale 1970 designed by Claude Parent.











Image 14. Gregory's Girl (Bill Forsyth, 1981).

cal, creating the sensation that the two characters could fall off into the abyss, in this case outside the frame, which until then had been responsible for the task of "containing and sustaining" (Derrida, 2001: 89)<sup>20</sup> a representation that now begins to spill out of its boundaries [Image 14].

In *Gregory's Girl* we see what Antonioni had warned of now realised and the state of the question today for what artists like Hito Steyerl consider the paradigm of the human being "in free fall" (Steyerl, 2011: np), which, paradoxically, he uses the inclined plane to demonstrate.

## FROM AEROPLANE TO SATELLITE: THE PRESENT TIME

By the 1990s, the preoccupation in relation to aerial images had taken on a new meaning. The patterned carpet of the First World War fighter planes, or the frames with no horizon lines, those unintelligible landscapes, are now eclipsed by a new type of image: the computer image. The map with coordinates has been replaced with the bitmap, another substantial shift in the way

we construct images and a step further towards the dematerialisation of the ground [Image 15].

One of the most representative cases of this new field of research are the theoretical and film studies of Harun Farocki, once again analysing the changes to the scopic regime resulting from military conflicts: this time the two wars against Iraq, in 1991 and 2003. In the late 1980s, Farocki studied the historical trajectory of aerial images, adding new concepts like "tracking", "phantom image", or the term he coined himself, the "operative image". But he was particularly concerned with the production of information — or propaganda, in terms of the Second World War.

The aerial view had already been popularised through the cinematic experience (as reflected by the case of Jean Vigo, among many others), but its use in military reconnaissance, which fell into the category of *classified* information, had not.

However, since the 1990s, these secret military manoeuvres were no longer reserved for the intelligence services of one side or the other, as they were turned into a spectacle in which the everyday citizen identifies with the military pi-

Image 15. Images of the World and the Inscription of War (Bilder der Welt und Inschrift des Krieges, Harun Farocki, 1989); War at a Distance (Erkennen und verfolgen, Harun Farocki, 2003).





lot on a mission. Using its technological nature to give the impression of objectivity, the computer image draws the citizen into the military conflict and, in Farocki's words, exploits him in an opportunity to show off and publicise the innovative weaponry of one side or the other, in a "new propaganda strategy" (Farocki, 2015: 169).

The battleground is turned into a space of representation (in Virilio's terms), as a setting in which to promote a product.

The military viewpoint is democratised and liberalised. The world on the ground, viewed by the air pilot, is now shared globally and simultaneously with all citizens from the comfort of their homes.

Farocki begins by considering operative images in relation to the Gulf War of 1991, the first conflict referred to as a "media war", and offers the example of the deliberate disappearance of any trace of human life in the images that were made public, to achieve an aseptic effect, the impression of a "clean war" (Farocki, 2015: 157) [Image 16].<sup>22</sup>

The aesthetic transformation thus now requires not only the codification of the elements on the ground, as was the case in the First World War, but also the familiarisation with the hitherto unknown green of night vision goggles, the negative image of infra-red screens, the data juxtaposed with the visuals in the style of *The Terminator* (James Cameron, 1984), the low-resolution black and white, the synthetic landscape, the viewfinder in the centre and the stain on the screen: an abstraction in motion, reformulated as a target, which is the human being.

In addition to this, there is also a deterritorial-isation strategy. The ground is no longer merely transformed by the point of view but produced by it. It turns from a computer image into an infographic image. The digital image allows this new peculiar feature; it does not depend on what reality looks like. The synthetic landscape—using Farocki's term—is a territory that resembles *Tron* (Steven Lisberger, 1982) more than reality. "The great cultural novelty of the digital image lies in





Image 16. War at a Distance (Erkennen und verfolgen, Harun Farocki, 2003); "The drone operator who said no", BBC News, np, 21 Jan. 2015 (frame from a BBC interview with a drone operator).

the fact that it is not reproduction but production technology" (Gubern, 1999: 147).

Furthermore, the map is no longer the patterned carpet that concerned Martin Jay, but a trimmed piece floating on an undifferentiated space. This framing exercise renders it impossible to locate the country in relation to others and turns it into an imaginary state — a strategy used widely in the news to discuss the Middle East, especially since 2011. This is a reinterpretation of the cinematic close-up, which "is a terrorist act because it violates the undifferentiated space" (Bonitzer, 2007: 91) [Image 17].

War has often been characterised as a video game and the battle as a field of perception in Virilio's terms, but how easy is it to bomb a land after 100 years of gradual preparation for its dislocation, deconstruction, and dehumanisation? In the documentary *Find*, *Fix Finish* (Sylvain Cruiziat, Mila Zhluktenko, 2017) — presented at the DocumentaMadrid Festival in 2017 — some US drone operators assigned to operations in the Middle East use an eloquent metaphor to describe this problem: "Have you ever stepped on an anthill and not given it a second thought? That's what our job was like."<sup>23</sup>

This documentary combines images taken from a drone with testimonies — some real and others inspired by real events — of several former US military operatives. The framing, although open, is somehow claustrophobic. The zenith view, with a mechanistic movement — Michael

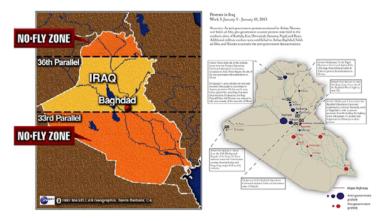


Image I7. Map used by CNN in January 1999; map used by the Institute for the Study of War in January 2013.

Snow's legacy — in constant rotation, makes gazing on the image veritably irritating, in an effort to emulate the experience as described by the soldiers themselves: "most of the time we'll just watch buildings spinning on our screens. Enough to drive you crazy"<sup>24</sup> [Image 18].

The sensation of spectacle now transcends the sensation of spectator and is perceived at a distance by the drone operator, who no longer flies over the battlefield but works instead from an office in his own country, completely detached from the conflict. The language itself is explicit in this respect: "I usually did Afghanistan first. I'll be there for four hours and then I might get moved to a box in a different *theatre*, maybe Yemen or Somalia, or wherever they sent us." <sup>25</sup>

The first cases of post-traumatic stress among drone operators appeared in the news in 2015.<sup>26</sup>

In these cases, the object of study is detachment as a psychological construction for survival: not to survive the dismemberment of the body, as Jay discusses in relation to the First World War, but to survive the destruction of the unknown civilian. en masse and from one's own home. The patients' statements include confessions revealing that many of these operators were under the effects of alcohol or drugs while they carried out their missions, having come to the conclusion — as Virilio and Farocki have asserted — that in the end it was just like playing a video game. This is a point that is also highlighted in the documentary by Cruiziat and Zhluktenko: "You see a little box pop-up on the screen, and lock on the guy, on those specific pixels. I would set the laser, the pilot would release the missile, and I guided it to its target."27 The problem is no longer the old debate over the identification of fiction as reality, but rather treating reality as an element of fiction, believing that this synthetic landscape is a virtual image thanks to the mediation of the screen. In the words of Slavoj Žižek, the ultimate achievement of the cinematic art has been to make us experience reality itself as a fiction (Žižek, 2001: 77).28

Apart from a few specific scenes of beaches, where the shapes and colours give the image a rhythm, the frames of the documentary convey a general sensation of terrain in the broadest sense of the word; undifferentiated, flat, scanned with a hunting movement. Nothing in the frame allows

Image 18. Find, Fix Finish (Sylvain Cruiziat, Mila Zhluktenko, 2017).









Image 19. Wings of Desire (Der Himmel über Berlin, Win Wenders, 1987).

the spectator to rest, as there is an ongoing wait to drop to the ground. It is a perfect example of what Hito Steyerl refers to as an "individual in free fall" (2011: np).

Steyerl asserts that "[m]any contemporary philosophers have pointed out that the present moment is distinguished by a prevailing condition of groundlessness" (2011: np) and points to the disorienting effect of handling images in free fall: "Imagine that you are falling. But there is no ground" (Steyerl, 2011: np). In *Find*, *Fix Finish* there is no need to imagine, as we witness the "normalisation of the rootless view resulting from the modern decentralisation of the subject in parallel with our exposure to aerial images — for example, Google Earth" (Emmelhainz, 2015).

Emmelhainz, a contemporary of Steyerl's, studies the condition of rootlessness and visuality in the Anthropocene era,<sup>29</sup> describing the contemporary gaze as "empowered, unstable and in free fall: a floating bird's view with no coordinates given a priori, reflecting the ubiquity of a present uprooted from temporality"<sup>30</sup> (Emmelhainz, 2015).

Although the zenith view turned the trenches into an unintelligible landscape, there was nevertheless a link between the representation and reality—if only for the possibility of falling to the ground at any moment. The satellite and the drone, however, expand the distance on the basis of constructing a safe space. This is a flight in which Icarus cannot fall, which definitively dislo-

cates representation from reality, and renders the ground completely dematerialised [Image 19].

#### **SAFETY FIRST?**

[Image 20].31 It is difficult to understand how the paradigm of instability has been constructed without considering its results: loss of freedomsfor the sake of a promise of safety. The feeling of groundlessness, of instability – constantly latent in the collective imaginary since 1914 and, therefore, in the construction of its images — has been changing in its representation of shape, point of view, horizon and framing, slowly progressing towards the disappearance of the ground and the creation of distance in absolute terms of body and ground. But this distance, measured by the screen, provides a fixed unit of measurement to hold onto. It is a stable form that does not change, in the knowledge "that only what happens in frame is important, that the only film space is screen space, that screen space can be manipulated through an infinite variety of possible real spaces and that disorienting the viewer is one of the filmmaker's most valuable tools" (Burch, 1981: 10). It is perhaps for this reason that it is such an effective method, as it offers a fixed module in a system of scales that is constantly moving away from the human being. Whatever the case may be, the screen today releases and/or constructs images in free fall. In other words, images from

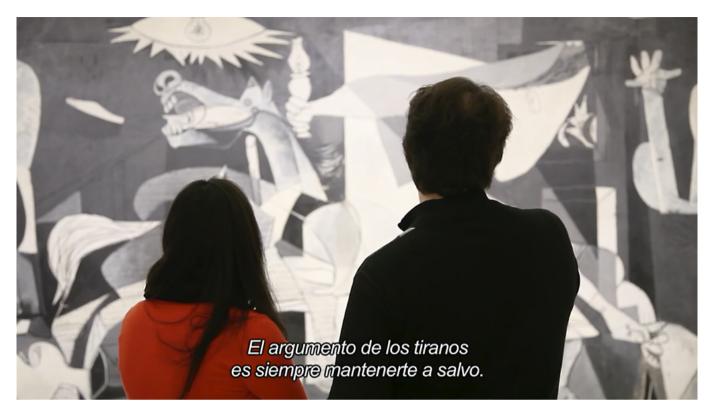


Image 20. The Guernica Variations (Guillermo G. Peydró, 2012).

the air, with no horizon or up-down references, dislocated, where, as Steyerl suggests, "the horizons have, in fact, been shattered" (2011: np), and as a result we never know whether we are falling or floating. It is a state of perfect *stasis*, with no ground on which to fall.

The construction of a groundless and therefore unstable world has created the perfect breeding ground for political exploitation, and particularly for mechanisms of repression on individual freedoms, based on a false and impossible promise of safety — the modern totalitarianisms discussed by Agamben in his essay on the state of exception (2004) or the reforming and reactionary strategies analysed by Naomi Klein in her *Shock Doctrine* (2007), among others, are the result of the slow but effective destruction of the safety paradigm thanks to the disappearance of the ground, in its broadest sense, under our feet.

Giuliana's feeling in Antonioni's *Red Desert* is now a social and global rather than individual anxiety. And it is no longer on an inclined plane,

but on the basis of having human-birds — Icaruses, like the ones in Leni Riefenstahl's work — who can no longer touch down because they have nowhere to land.

Paradoxically, all the aerial war images that have destroyed this classical body-gravity-ground relationship have done so precisely in the interests of conquering ground, either its extension in the case of the two World Wars, or its riches — oil in the case of the Gulf War, perfectly illustrated by the images of Saddam Hussein setting Kuwait's oil wells on fire before the US troops arrived. But as I mused above, how easy is it to bomb a land after one hundred years of gradual preparation for its dislocation, deconstruction, and dehumanisation?

#### **NOTES**

- 1 Words taken from Aguaespejo granadino (José Val del Omar, 1955).
- 2 Original quote: "Désormais la vision aérianissée échappe à la neutralisation euclidienne" (Virilio, 1984: 24).
- 3 The first commercial flight ended a long period of experimentation through private financing (pursued with kites, balloons, aeroplanes, and a long list of other experiments) and marked the first publicly funded for-profit flight, in this case covering the distance from St. Petersburg, Florida, to Tampa for tourists.
- 4 1914 marked the beginning of the First World War in Europe, in which the aircraft would play a primordial role in the scale of a military conflict. Only five years after the first successful flight across the English Channel by Louis Blériot, four full squadrons flew to France from England, this time to participate as a military detachment. War, which until then it had only been possible to fight on the ground in close combat with the enemy on the same level, radically changed scale, in terms of both the perception of the enemy deployment and the capacity to cause casualties. From the air, even the trenches the only place reasonably safe from horizontal fire were easy targets.
- 5 The terms used by Castro make reference to the work, quoted later in this article, of Paul Virilio. In particular, he makes reference to the title of his chapter "Le Cinéma, ce n'est pas je vois, c'est je vole" in the book *Guerre et cinéma: Logistique de la perception* (1984), also published in *Cahiers du cinéma*, 357: 30–33, in the same year.
- 6 The texts contain numerous metaphors to describe pilots, such as cloud riders, angels, dreamers, pioneers, knights of the sky, etc.
- 7 Martin Jay suggests that this point of view is possibly what led Gertrude Stein to refer to the conflict as "the Cubist war" (Jay, 2007: 164).
- 8 The first aerial photograph dates back to 1889. It was taken by Arthur Batut, the inventor of kite photography. His first book, *Kite Aerial Photography*, was published in 1890.

- 9 Martin Jay is quoting Leed's *No Man's Land* here. The original quote is: "The sky is charged with intense significance: It must be the residence of the observer watching himself struggle through the nightmare of war, for only then will the eye survive the dismemberment of the body" (Leed, 1981: 137).
- 10 Although films on Manhattan generally focused on power represented in architectural terms, there was a piece shot in 1912, now titled *Wright B Over Manhattan*, in which the pilot Frank Coffyn performs some manoeuvres around the Statue of Liberty, which are presented in intertitles as "a good example of aerial bombing." The intertitles were apparently added in 1943.
- 11 Original quote: "Dans tout la première partie, il est absolument important qu'en aucune manière la présence de l'homme et de son oeuvre ne soit révélée. Le pays merveilleux était là, livré par la nature. Le pays est placé sous la tutelle du ciel et de l'influence de la mer. L'ècran s'ouvre sur le ciel" (cited in L'Herminier, 1985: 69).
- 12 Peter Greenaway constructed his exhibition *Flying* over Water presented at the Fundació Joan Miró in Barcelona in 1997 around the figure of Icarus.
- 13 Riefenstahl explained in numerous interviews that all her productions were under her strict control, and although she acknowledges these technical innovations contributed by Ertl, she does so in a context in which she clarifies that she herself trained these operators, thereby attributing the merit once again to herself. Retrieved from *The Wonderful Horrible Life of Leni Reifenstahl*, Ray Müller, 1993.
- 14 In Michael Delahaye's interview titled "Leni and the Wolf" (pp. 453-473), first published in *Cahiers du cinéma*, 170 (Sep. 1965) and later translated into English in *Cahiers du cinéma in English*, 5 (1966). Can also be found in *Interview with Film Directors* by Andrew Sarris (1969).
- 15 Drehschwenk: can be translated as "rotating swivel".
- 16 Although *Olympia* stresses cooperation between nations, without focusing on nationalities, it omits all Jewish athletes who participated in the games at that time, with no "apparent motive" (Cooper, 1986: 5), and Hitler's obvious displeasure with the victories of Jes-

- se Owens, as well as his disapproval of it being given importance in the first part of the film (Bordwell and Thompson, 1995: 109).
- 17 Quote by Leni Riefenstahl taken from the documentary *The Wonderful Horrible Life of Leni Reifenstahl*, (Ray Müller, 1993). Retrieved from: https://www.youtube.com/watch?v=wA7Iv iMRrw.
- 18 Original quote: "L'hypothèse de la 'Fonction oblique' préconisant la fixation de la vie des hommes sur les plans inclinés" (Parent, 1970: 5).
- 19 Quoted in Elliot, 2001: 218.
- 20 Derrida is not speaking of the cinematic "frame", but of a "framework" and above all of "contextualising" thought (the thought of Kant in this particular case).
- 21 For Farocki, operative images are "images that are not made to entertain or to inform [...]. Images that do not seek merely to reproduce something, but that instead are part of an operation" (Farocki, 2015: 153).
- 22 Retrieved from: https://www.bbc.com/news/av/magazine-30483010/the-drone-operator-who-said-no.
- 23 Quote taken from *Find*, *Fix Finish* (Sylvain Cruiziat, Mila Zhluktenko, 2017).
- 24 Quote taken from *Find*, *Fix Finish* (Sylvain Cruiziat, Mila Zhluktenko, 2017).
- 25 Quote taken from *Find, Fix Finish* (Sylvain Cruiziat, Mila Zhluktenko, 2017). Italics are mine.
- 26 See for example: http://www.telegraph.co.uk/culture/hay-festival/11639746/Post-traumatic-stress-disorder-is-higher-in-drone-operators.html, https://www.theguardian.com/world/2013/jul/28/life-us-drone-operator-artist, https://www.theguardian.com/world/2015/nov/18/life-as-a-drone-pilot-creech-air-force-base-nevada, https://www.sott.net/article/306793-Former-drone-operators-say-they-were-horrified-by-cruelty-of-assassination-program, among others.
- 27 Quote taken from *Find*, *Fix Finish* (Sylvain Cruiziat, Mila Zhluktenko, 2017).
- 28 Full quote: "The ultimate achievement of film art is not to recreate reality within the narrative fiction, to seduce us into (mis)taking a fiction for reality, but, on the contrary, to make us discern the fictional aspect of reality itself, to experience reality itself as a fiction" (Žižek, 2001: 77).

- 29 The term "Anthropocene" was coined in 2000 by the Nobel prize winner for chemistry Paul Crutzen. It designates a historical period (whose dates are yet to be determined) that reflects the impact of human behaviour on the Earth, constituting a new geological era. It is suggested to have begun with the Industrial Revolution in the eighteenth century. However, it has not yet been officially approved by the International Commission on Stratigraphy.
- 30 Article published in SalonKritik.net (April 5, 2015). Retrieved from: http://salonkritik.net/10-11/2015/04/post 28.php#more.
- 31 The audio belongs to an interview with Alex Jones (Austin, Texas) on the use of unmanned aircraft drones on US soil. *RT News*, 14-12-11. The news item is presented as "Signs that the US may be moving in the direction of a police State." Retrieved from https://www.youtube.com/all\_comments?gl=SN&hl=fr&v=HYETraMg mM.

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# TO FALL OR TO FLOAT: A CINEMATOGRAPHIC HISTORY OF A PARADIGM SHIFT IN STABILITY AND THE DISAPPEARANCE OF THE GROUND

#### Abstract

Some thinkers consider that the beginning of the s. XXI is marked by instability as a new paradigm and therefore a false promise of security as a result. Through the progressive evolution of aerial images, a discourse is articulated on how the convention of stable soil has progressively been destroyed, and consequently the need for a reinterpretation of the body-gravity relation; through which it is possible to distill the construction of the contemporary subject — in free fall — and the instrumentalization of this paradigm of instability.

#### Key words

Frame; aviation; satellite; drone; fall; Icarus; stability; ground.

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#### CAER O FLOTAR: UNA HISTORIA CINEMATOGRÁFICA DE LA DESAPARICIÓN DEL SUELO Y EL PARADIGMA DE LA ESTABILIDAD

#### Resumen

Algunos pensadores consideran que el inicio del s. XXI está marcado por la inestabilidad como paradigma y, en consecuencia, una falsa promesa de seguridad como resultado. A través de la progresiva evolución de las imágenes aéreas, se articula un discurso sobre cómo se ha ido destruyendo progresivamente la convención de suelo estable y, en consecuencia, la necesidad de una reinterpretación de la relación cuerpo-gravedad; a través del cual se puede llegar a destilar la construcción del sujeto contemporáneo —en caída libre— y la instrumentalización de este paradigma de inestabilidad.

#### Palabras clave

Encuadre; aviación; satélite; drones; caída; Ícaro; estabilidad; suelo.

#### Autora

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